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CDF WeeklyMeeting

February 23, 2006

- Last week Tevatron Saga
- Store Summary
- Operational Issues
- Access News and Plans

# Brief Tevatron Saga for last week

### Thursday, February 16

- Store 4647 (1x1) was extended for 8.5 hrs.
- Pbar reverse proton studies

## Friday, February 17

- TEL study, D0 access
- Loading new store, Tev quenched during the squeeze (got beam vertical orbit distortion, B11V separator was not switching polarity due to HV power supply failure)
- Long Tev studies, stacking, transfers to recycler

## Saturday, February 18

- Store 4653, luminosity was less than we expected due to
  - Large proton emittance (beam unstable when loading pbars)
  - Radiation trip at D0, some of pbar bunches were lost (36x32 store)
- The MI electrical safety system developed a ground fault, the Recycler stash is gone

## Tevatron Saga -2

### Sunday, February 19

- Store 4653 was terminated
- Tev studies to investigate beam instability during the pbar loading
- Access to the Linac and Booster
- Store 4654 was started

#### Monday, February 20

- Store 4654 terminated followed by D0 access
- Tev studies, quench at A1 at the end of studies, apparently caused by a messy abort. It was a mild quench
- Recycler study
- Store 4658 was started

### Tuesday, February 21

- Store 4658 lost due to vacuum crate power supply failure
- Process of reducing intensity began in advance of the shutdown
- Store 4664 started
- Kicker problems when transfering pbars, so it was only 36x20 store

## Tevatron Saga - 3

### Wednesday, February 22

- Problems with kicker declared as understood
- Store 4664 was terminated to start next and better one
- Store 4666 aborted in 1 hr., due to the F4 failure



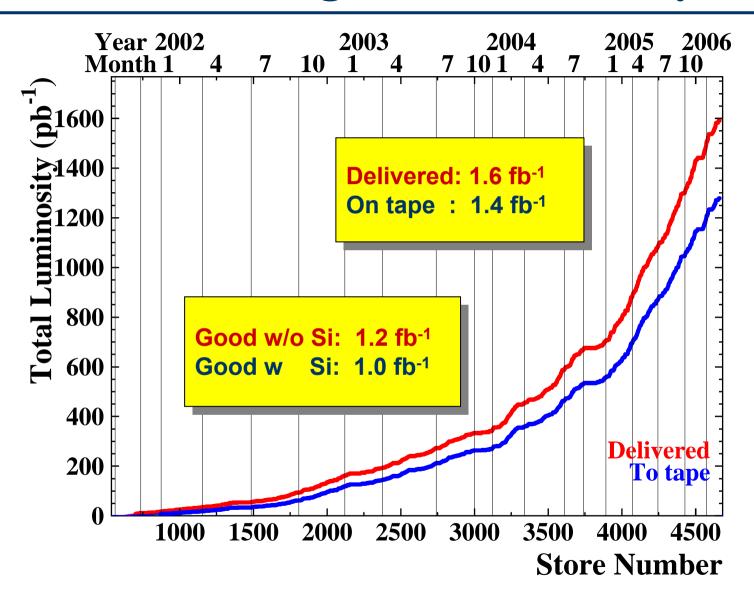


- F47-2 body relief from the downstream end of the dipole. Super-insulation can be seen on the floor
- F4 warming up right now

# Store Summary (February 16 - 23, 2006)

Store	start Date	Time [hours]	Initial lumi [E30]	Integ lumi delivered [pb <sup>-1</sup> ]	Live lumi [pb <sup>-1</sup> ]	GoodRun w/ si [pb <sup>-1</sup> ]	Comments
4647 Normal							1x1 store
4653 Normal	02/18	22.7	41.3	1.4	1.2 84%	1.0 70%	36x32
4654 Normal	02/19	23.4	76.9	2.8	2.6 93%	2.2 79%	
4658 Abort	02/20	11.1	159.1	3.4	2.8 83%	2.7 82%	Vacuum crate problems
4664 Normal	02/21	13.8	57.6	1.4	1.1 77%	1.1 77%	36x20 store
4666 Abort	02/22	0.9	178.3	0.6	0.4 71%	0.4 71%	F4 failure
Total	01/12 -19	71.9		9.44	7.9 84.5%	7.3 78%	

# **Run II Integrated Luminosity**



# Operational Issues

- SVT is working with 512k patterns
- Trigger
  - New configuration with XFT upgrade (4-layer tracks instead of 3-layers) was tested
  - New default trigger table announced Physics 4 00 [3,798,626]
    - B-triggers added, many other improvements...
- CLC
  - HV problem with one single channel still annoying at the beginning of stores
- Muon
  - Muon PC3 rebooting itself, under investigation
- L2 pulsar
  - High rate CES errors, HRR worked, under investigation

# Access summary and Plans

### Wednesday, February 22

- Plug Calorimeter
  - CAEN card was replaced on West wedge 1
- MiniPlug
  - Mary and Koji replaced ADMEM card in b0fcal01 (slot 8)
- CPR2
  - Faulty CAEN card was replaced (Willis donated a plug spare one)

#### Plans:

- Beam operation would end on Saturday afternoon
- Plug source calibration today
- We will take large cosmic run (for XFT and others)
- Get ready for the shutdown